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concl.
GHz band and a second transmission frequency band being a frequency band below the 59 to 64

GHz band.--

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Claims 1-33 were pending in this application. By the present amendment, Claims 1-21 are canceled, Claims 22, 25 and 26 are amended and Claims 34-51 are added.

Patentability of Claims 34-51

Claims 1-9 were rejected under 35 U.S.C. 103(a) over Moelard in view of Oprescu-Surcobe (hereafter, "Oprescu"). Claims 10-17 were rejected under §103(a) over Levardon in view of Oprescu. Claims 1-17 are canceled in favor of Claims 34-51, which are believed to be patentably distinguishable over the references for at least the following reasons:

In contrast to independent Claim 34, for example, none of the cited references, alone or in combination, discloses or suggests a wireless transmission system that includes the following:

"a public download server connected to an information source;

an antenna for transmitting data provided by said server; and

a mobile terminal operable to receive the transmitted data;

wherein said antenna has a kidney shaped beam in cross-section."

In particular, none of the cited references discloses an antenna with a kidney shaped beam in cross-section, and thus even if the references were to be combined in the manner suggested in the Office Action, the invention of Claim 34 would not result. Accordingly, Claim

34 cannot be considered obvious over the combination of Moelard with Opresu or Levardon with Oprescu.

Significantly, the use of an antenna with a kidney shaped beam to transmit data provided by a public access server exhibits a technological advantage that has not been recognized in the prior art, as explained in the specification. That is, there is less power transmitted in a predetermined direction from the server antenna where a relatively large amount power is not needed, such as on a sidewalk directly in front of a server antenna that is mounted on a wall facing the sidewalk. As a result, power is transmitted from the server in a more efficient manner. This technological advantage is an objective indication of the non-obviousness of the invention.

It is noted that the Office Action, in rejecting canceled claim 8 which related to an antenna with a kidney shaped beam, appeared to indicate that the claim merely adds the intention of using the system in a particular environment. However, the feature of a server antenna having a kidney shaped beam in cross-section clearly defines a structural aspect of a component in the claimed system. Thus, the Examiner's analysis is misguided. In addition, no reference was cited purporting to disclose this feature, and thus it appears as though the rejection was based on Official Notice. The Applicant respectfully traverses this Official Notice, and respectfully requests that if Claim 34 is rejected based on a similar rationale, that a reference be provided that specifically discloses the above-noted claim limitation.

Claims 35-42 are patentable based at least upon their dependencies from Claim 34.

In addition, by way of example, Claim 35 claims that the antenna is mounted on a vertical surface, and the kidney shaped beam has a local minimum level in the cross section in a direction opposing the surface. Claim 36 claims that the antenna is mounted on a ceiling, and the kidney shaped beam has a local minimum level in the cross section in a direction opposing the ceiling.

Obviously, none of the references discloses or suggests these features. Note that such features are not “intended use” in that, what is claimed is a system having various elements, and the placement of such elements in relation to other claim elements impacts the structure of the overall system.

Independent Claim 43 is patentable over the prior art of record for the same reasons discussed concerning analogous features of Claim 34. Claims 44-51 are patentable based at least upon their dependencies from Claim 43.

Patentability of Claims 22-33

Independent Claim 22 was rejected under 35 U.S.C. 103(a) as being unpatentable over Dethlogg. While the Applicant disagrees with the rejection, this claim has been amended to more clearly define the claimed subject matter.

Contrary to amended Claim 22, Dethlogg does not disclose or suggest a wireless transmission system having a plurality of public access servers and at least one mobile terminal, wherein the mobile terminal is designed to upload/download content from one of said public access servers by means of a wireless transmission *and the public download servers all operate with the same transmission frequency* in a non-licensed band. Further, Dethlogg does not disclose or suggest the following:

“each public access server downloads/uploads content to mobile terminals only within a small localized area; and

there is no hand-over between adjacent public access servers.”

The above-emphasized features are advantageous in a number of ways. Since each public access server downloads/uploads content to mobile terminals only within a small localized area, all of the public download servers are able to operate on the same frequency without interfering with one another. In other words, the system exhibits extremely high frequency re-use, thereby

eliminating operating frequency constraints between adjacent public access servers. Indeed, the fact that all servers operate at the same frequency without regard to the frequency that neighboring servers are operating at, enables the design of the servers to be simplified. And, by disallowing hand-over between adjacent servers, the system is drastically simplified in comparison to those systems that are based on a hand-over model. At the same time, users can advantageously download desired information from the servers whenever they're in the vicinity of a server, and view that information at other times. (Examples presented in the specification demonstrate the utility of the inventive approach – e.g., download information while waiting at a traffic light, etc.)

As recognized in the Office Action, Dethlogg does not describe a system in which all public download servers operate with the same transmission frequency. The Examiner has not relied upon any reference that teaches this feature. Further, the Office Action has not cited any reference that teaches a system designed to communicate with mobile terminals that specifically does not provide hand-over between adjacent public access servers. Further, no reference has been cited that specifically teaches a public access server downloading/uploading content only within a small localized area (e.g., 20 meters or less).

Accordingly, as the Dethlogg system lacks several essential features of amended Claim 22, and no reference is available in the prior art that suggests the Dethlogg system could be modified to include these features, and in view of the above-noted advantages of the claimed invention, it is manifest that this claim is not rendered obvious by Dethlogg under §103.

Independent Claim 26, as amended, is patentable over Dethlogg for analogous reasons.

Claims 23-25 and 27-33 are patentable based at least upon their dependencies from Claims 22 or 26.

In addition, Claim 31, for example, claims that the public access server is installed in public vehicles. In this regard, the Examiner stated that this claim (grouped within Claims 27-33) merely adds the intention of using the system in various environments. This analysis is incorrect. Claim 31 claims that one element of the system, i.e., the public access server, is installed in a particular environment, i.e., public vehicles. Such installation changes the configuration of the entire system. It should be apparent that by placing the server in a public vehicle, the access by the server to other components of the system is changed, and thus the configuration of the entire system is changed. For instance, since the server downloads/uploads content to/from a mobile terminal within a small localized area in the vicinity thereof, it is apparent that it will primarily communicate with mobile terminals that are also in the public vehicle (or perhaps directly outside of the vehicle). This is different from the case where a server would be mounted on a building, for example. Thus, the configuration of the overall system is changed by installing the server in public vehicles. Similarly, the system configurations are changed in a non-obvious manner with the implementations as recited in Claims 27-30 and 32-33. Thus, the Examiner's contention that the limitations are merely "intended use" is unfounded.

Conclusion

In light of the foregoing, entry of this amendment, and the allowance of this application with Claims 22-51 are respectfully solicited.

The above statements concerning the disclosures in the cited references represent the present opinion of Applicant's representative and, in the event that the Examiner disagrees, Applicant's representative respectfully requests the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.

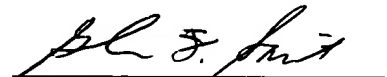
In regard to the claims amended herein, it is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. 112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Version With Markings to Show Changes Made."**

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

Respectfully submitted,
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Version With Markings to Show Changes Made

In the Specification:

The specification has been amended as follows:

The paragraph beginning at page 2, line 1 has been replaced with the following rewritten paragraph:

--In view of the above-cited prior art it is the object of the present invention to propose a wireless transmission system designed for a transmission of data in the 60 GHz range [tearing] taking advantage [from] of the fact that [said] the 60 GHz range is a non-licensed frequency band and of [from] the specific propagation properties (high attenuation, oxygen absorption).--

The paragraph beginning at page 8, line 25 has been replaced with the following rewritten paragraph:

-- - Due to the [large] high frequency of the operation the total front end size and antenna size may be very small and very easy to be integrated in various types of terminals: beginning from current PDA types of terminals, through so-called 2G and 3G to the future UT (or TRF) terminal.--

The paragraph beginning at page 8, line 31 has been replaced with the following rewritten paragraph:

-- - Due to the [large] high frequency and [large] high attenuation, [small] low transmission power, and specified UT antenna pattern, as well as large oxygen absorption,

frequency [RE-USE] re-use may be easily adopted, so there is almost unlimited possibility of providing very high [large] wireless data rates in very small environments. Density and [Capacity] capacity of the system is almost unlimited, in contrast to so-called 3G and future 4G systems.--

IN THE CLAIMS:

Claims 1-21 have been canceled.

Claims 22, 25 and 26 have been amended as follows:

--22. (Amended) Wireless transmission system,

comprising a plurality of public access servers and at least one mobile terminal,

wherein the mobile terminal is designed to upload/download content from one of said [the] public access servers by means of a wireless transmission and the public download servers all operate with the same transmission frequency in a non-licensed band;

each public access server downloads/uploads content to mobile terminals only within a small localized area; and

there is no hand-over between adjacent public access servers.--

--25. (Amended) Wireless transmission system according to claim 22,

characterized in that

[there is no hand-over between adjacent public access server] said small localized area is within 20 meters of each public download server.--

--26. (Amended) Method for uploading and/or downloading content from [a] public access servers to/from mobile terminals over an air interface,

wherein the air interface uses a non-licensed frequency band and the transmission itself is free of charge,

each public access server downloads/uploads content to/from a mobile terminal within a small localized area in the vicinity of that public access server; and

there is no hand-over between adjacent public access servers.--